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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,058

02/20/2004

Chung-Wen Ko

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11/23/2005

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EXAMINER

LIE, ANGELA M

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,058

Applicant(s)

KO, CHUNG-WEN

Examiner

Angela M. Lie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (US 6211613) in the view of Van Order (US 6247820).

As to claim 1, May teaches an electroluminescent display comprising: an organic electroluminescent display (OLED) panel (column 6, lines 21-25), a reflective sheet (Figure 1, element 10). May does not disclose a brightness regulating film for light transmission between the organic electroluminescent display panel and the reflective sheet. Van Order teaches electro-optic medium placed between two electrodes (Figure 2, elements 19, 15 and 17), where it is used to change light transmissivity (column 3, lines 26-29 and lines 46-48). It would have been obvious to one of ordinary skill in the art during the time when the invention was made to incorporate electro-optic medium placed between front electrode and the reflective sheet (wherein May is teaching an OLED being placed between those two electrodes (column 6, lines 21-25)), as taught by Van Order into May's organic electroluminescent display, because this allows to keep a high contrast of displayed image regardless of ambient light intensity (column 1, line 67 and column 2, lines 1-2).

As to claim 2, May and Van Order teach all the limitations presented in claim 1. May also teaches the display wherein the organic electroluminescent display panel comprises: a transparent substrate (Figure 1, element 12), a first transparent electrode over the transparent substrate (Figure 1, element 4), a light emitting layer over the first transparent electrode (column 6, lines 22-26), a second transparent electrode over the light emitting layer (Figure 1, element 2).

As to claim 3, May teaches the display wherein the light-emitting layer is an organic electroluminescent film (column 6, lines 21-26).

As to claim 4, Van Order teaches the display wherein the brightness regulating film is an optical slit (Figure 2, element 15) to control light transmission from the environment (column 3, lines 46-48).

As to claim 5, Van Order teaches the display wherein the brightness regulating film is made of electrochromic material (column 7, lines 39-40) or liquid crystal (column 7, lines 41-43) capable for controlling light transmission thereon by adjusting current applied thereto (column 3, lines 44-48, Van Order teach using a control voltage to control transmission of the medium, however current and voltage are related, therefore controlling voltage also leads to controlling current).

As to claim 6, Van Order teaches the display further comprising a photo sensor (column 3, lines 48-49) to detect light intensity of the environment (column 1, lines 43-44).

As to claim 7, Van Order teaches the display wherein the brightness regulating film adjusts the light transmission intensity from the environment according to a light intensity of the environment detected by the photo sensor (column 1, lines 41-44).

As to claim 8, Van Order teaches the display wherein the brightness regulating film (Figure 2, element 15) adjusts a light-transmitting mode thereof by controlling current intensity applied thereon (column 3, lines 46-48, since voltage and current are related, controlling voltage leads also to controlling current) according to a light intensity of the environment as detected by the photo sensor (column 1, lines 43-44).

Response to Arguments

3. Applicant's arguments filed on October 24, 2005 have been fully considered but they are not persuasive.

4. With respect to the applicant's assertion on page 4, fourth paragraph, stating that Van Order in US patent 6,247,820, does not teach or suggest OLED display system, but instead he teaches an electro-optical mirror display, and furthermore because of this deficiency the combination of teachings disclosed in US patent 6,211,613 and US patent 6,247, 820 is not proper. The examiner agrees that Van Order does not explicitly state that OLED display is used in his invention, however OLED is an example of electro-optical medium (i.e. molecules dispersed in the liquid, which are capable of changing their orientation based on the electric field supplied to the layer), furthermore the examiner would like to point out that Van Order does not need to teach this limitation because May teaches an organic electroluminescent display. Moreover May's

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invention was used as a main reference in the rejection and Van Order's teaching regarding electrochromic material was used as a secondary reference. The examiner considers the combination of those two teachings to be obvious because both of the inventions refer to the display systems and both of them have similar structure i.e. two electrodes, reflecting layer, display layer. Because all the requirements for prima facie case of obviousness were fulfilled, the examiner considers the above rejection to be proper.

Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6738112 discloses a liquid crystal display with particular use of diffusing films, comprising: reflective layer, LCD and two electrodes.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angela M Lie

shih-chao chen 11/21/05
SHIH-CHAO CHEN
PRIMARY EXAMINER